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| 09/856,915 | 05/30/2001 | Sau Tsien Lim | 2001-0687A | 5321 |

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EXAMINER

SHIBRU, HELEN

ART UNIT PAPER NUMBER

2616

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,915

Applicant(s)

LIM ET AL.

Examiner

HELEN SHIBRU

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendments, filed on 12/13/2005, have been entered and made of record. Claims 1-9 are pending. In view of the Applicants' amendments objection to the drawing are hereby withdrawn.

Response to Arguments

2. Applicant's arguments filed on 12/13/2005 have been fully considered but they are not persuasive. See the new ground(s) of rejections set below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase (US Pat. No. 6,366,732) in view of Ohishi (US Pat. No. 6,169,846).

Regarding claim 1, Murase discloses bit stream buffering and demultiplexing apparatus for a DVD Audio decoding system the apparatus comprising:

a demultiplexer (see signal separating unit (86) in fig. 24) for demultiplexing a coded program stream (VOB in fig. 24) to elementary streams (video decoder (87) sub-picture decoder (88) and audio decoder (89) in fig. 24, and see col. 29 lines 20-34) into a plurality of elementary streams (see fig. 24 video, sub-picture and audio decoders);

an audio still video unit bit buffer (see sub-picture decoder (88) and video decoder (87) in fig. 24) for storing demultiplexed audio still video program streams (see col. 29 lines 25-26 and lines 30-33, it is inherent that the audio is in the audio buffer for the decoding operation);

a bit stream buffer (see audio decoder (89)) for storing a demultiplexed audio program stream (see col. 29 lines 30-32, it is inherent that the audio is in the audio buffer for the decoding operation); and

an audio still video object address pointer table (see system controlling unit (93)) for storing address locations of the demultiplexed audio still video program streams (see fig. 12B PGC information, col. 30 lines 37-42, 55-62, col. 31 lines 57-66 and col. 32 lines 19-31 system controlling unit controls includes PGC information which stores the VOB address information table) and storing syntax error information (see col. 15 line 30-col. 16 line 31, col. 18 lines 17-23, col. 21 lines 35-43, col. 23 line 40-col. 24 line 19, highlight information).

Claim 1 differs from Murase in that the claim further requires the demultiplexer is further for performing syntax error checking of an audio still video program stream during the demultiplexing of the coded program stream and storing resultant syntax error information obtained by the syntax error checking in the audio still video object address pointer table.

In the same field of endeavor Ohishi discloses syntax error checking of the program during demultiplexing of the coded program stream (see col. 7 line 47-col. 8 line 15 and fig. 6). Ohishi further discloses the syntax information is written in to the memory (see col. 4 lines 40-49). Ohishi further discloses the demultiplexer and error correction information portion detects the starting points of the coded data and the corresponding error correction information portion to correct any errors with in the coded data (see col. 8 lines 16-37). Therefore in light of the

teaching in Ohishi it would have been obvious to modify Murase by providing syntax error checking during demultiplexing of the coded program stream in order to specify respective data elements.

Regarding claim 2, Murase discloses audio still video object address pointer table is further for storing status information of the demultiplexed audio still video program streams (see fig. 26, col. 30 line 63-col. 31 line 33 system controlling unit includes highlight information for the selected PGC information).

Regarding claim 3, Murase discloses the demultiplexer comprises a means for demultiplexing the coded program stream into (VOB in fig. 24) the plurality of elementary streams (video decoder (87) sub-picture decoder (88) and audio decoder (89) in fig. 24, and see col. 29 lines 20-34); and

a means for switching between(selecting units (122) and (123) in fig. 25) writing to said audio still video unit bit buffer and said bit stream buffer (see sub-picture selecting unit (122) and audio selecting unit (123) and col. 29 lines 42-53), the switching to writing said audio still video unit bit buffer occurring whenever an input bitstream is an audio still program stream (see col. 29 lines 48-57 and 63-65, the audio still video program input bit stream includes the sub-picture which is selected from the audio).

Regarding claim 4, Murase discloses audio still video unit bit buffer for storing the demultiplexed audio still video program streams comprises: a means for storing elementary streams of audio still video (see fig. 25 signal separating unit (86), video and sub-picture); and a means for storing start address pointers of all or a sub group of elementary

streams of an audio still video unit (see col. 34 line 63-col. 35 line 14, it is inherent that the decoder (88) in fig. 24 stores the start and end address to color the selected sub-picture).

Claim 5 is rejected for the same reason as discussed in claim 2 above.

Regarding claim 6, the limitations of claim 6 can be found in claims 2 and 4 above.

Therefore claim 6 is analyzed and rejected for the same reason as discussed in claims 2 and 4.

Regarding claim 7, Murase discloses status information storing means comprises: a means for storing syntax error information (see fig.10A h5, instruction '00...this pack has no highlight information, see fig. 28 step 137, fig. 29 step 144, 147, 149, see col. 15 line 30-col. 16 line 31, col. 18 lines 17-23, col. 21 lines 35-43, col. 23 line 40-col. 24 line 19, highlight information and col. 34 lines 10-19, the syntax is received based on the codes 00 and 01); and a means for storing other information (trick play) related to the audio still video unit (see col. 34 lines 10-12 and col. 43 lines 17-29).

Regarding claim 8, Murase discloses a bit stream buffering and demultiplexing method for a DVD Audio decoding system, the method comprising the steps of:

demultiplexing a coded program stream (VOB in fig. 24) into a plurality of elementary streams (video decoder (87) sub-picture decoder (88) and audio decoder (89) in fig. 24, and see col. 29 lines 20-34);

storing demultiplexed audio still video program stream (see fig. 24 picture mixing unit (90), see sub-picture decoder (88) and video decoder (87) in fig. 24, see col. 29 lines 25-26 and lines 30-33, it is inherent that the audio is in the audio buffer for the decoding operation);

storing a demultiplexed audio program stream (see audio decoder (89), col. 29 lines 30-32, it is inherent that the audio is in the audio buffer for the decoding operation);

storing address locations of the demultiplexed audio still video program streams (see fig. 12B PGC information, col. 30 lines 37-42, 55-62, col. 31 lines 57-66 and col. 32 lines 19-31 system controlling unit controls includes PGC information which stores the VOB address information table), wherein the demultiplexing step includes a step of comprises demultiplexing an audio still video unit program stream during a pre-loading to an audio still video unit bit buffer (see fig. 25 signal separating unit (86) which shows the separation of video sub-picture and audio before outputting to the decoders (87), (88) and (89)).

Claim 8 differs from Murase in that the claim further requires performing syntax error checking of an audio still video program stream during the demultiplexing of the coded program stream and storing resultant syntax error information obtained by the syntax error checking in the audio still video object address pointer table.

In the same field of endeavor Ohishi discloses syntax error checking of the program during demultiplexing of the coded program stream (see col. 7 line 47-col. 8 line 15 and fig. 6). Ohishi further discloses the syntax information is written in to the memory (see col. 4 lines 40-49). Ohishi further discloses the demultiplexer and error correction information portion detects the starting points of the coded data and the corresponding error correction information portion to correct any errors with in the coded data (see col. 8 lines 16-37). Therefore in light of the teaching in Ohishi it would have been obvious to modify Murase by providing syntax error checking during demultiplexing of the coded program stream in order to specify respective data elements.

Regarding claim 9, the limitations of claim 9 can be found in claim 1. Therefore claim 9 is analyzed and rejected as discussed in claim 1 above.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

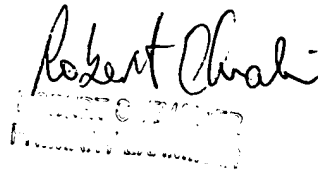
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MEHRDAD DASTOURI can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru
February 21, 2006

A handwritten signature in cursive script, appearing to read "Robert Chah", is written over a rectangular stamp. The stamp contains some illegible text and a date, possibly "FEB 21 2006".